REMARKS

Applicant appreciates the thorough examination of the present application that is reflected in the Official Action of August 4, 2004. Applicant respectfully submits that all of the pending claims are patentable for the reasons that now will be described.

Claim Amendments Unrelated to the Objections or Rejections

Claims 1, 6, 7, 10-12, 14, 15, and 32-34 have been amended to eliminate recitations of "step". Claims 27-29, 32-34, and 36-37 have been amended to eliminate "means" language in the computer program product claims.

Objections and Rejections of Claims 9, 10, 20, 21, and 31 Have Been Overcome

Claims 9, 10, 20, 21, 31, and 32 have been amended to clarify that the recited extension of the maximum duration by subsequent connection request messages and/or by the executing server application occurs "prior to expiration of the maximum duration for which the started affinity persists". Accordingly, Applicant submits that the objections to these claims, and rejections under 35 USC §112, second paragraph, have been overcome.

Rejections of Claims 1-11, 16-22, and 27-33 Have Been Overcome

Claims 1, 16, and 27 have been amended to recite "with an executing server application" and to recite "in response to the signaling" as suggested by the Examiner, on Page 3 of the Office Action, to clarify these claims.

Claims 12, 23, and 34 have also been amended to recite "one or more currently-active affinities with the particular one of the executing server applications", and to recite "using workload balancing when the client application sending the received connection request is not identified in the stored information as having one of the one or more currently-active affinities with the particular one of the executing server applications" as suggested by the Examiner, on Page 4 of the Office Action, to clarify these claims.

Accordingly, Applicant submits that the rejections under 35 USC §112, second paragraph, have been overcome. Thus, Applicant submits that these claims and the claims that depend therefrom are in compliance with 35 USC §112.

Applicants File Herewith a Terminal Disclaimer to Overcome the Provisional Obviousness-Type Double Patenting Rejection of Claims 1-37:

Claims 1-37 have been provisionally rejected under a nonstatutory judicially created doctrine of obviousness-type double patenting over copending U.S. Application Serial No. 09/824,639. Applicant submits herewith a Terminal Disclaimer disclaiming additional term over the copending U.S. Application Serial No. 09/824,639. Applicant's agreement to provide a Terminal Disclaimer is to expedite issuance of the present case and does not admit that the present invention is obvious in light of the copending U.S. Application Serial No. 09/824,639. Withdrawal of the obviousness-type double patenting rejection is respectfully requested.

Independent Claims 1, 12, 16, 23, 17, and 34 Are Patentable Over Modi Et al.

Independent Claim 1 stands rejected under 35 USC §102(e) over U.S. Patent No. 6,587,866 to Modi et al. ("Modi"). Claim 1 recites:

1. A method of providing server affinities for related connection request messages in networking environments which perform workload balancing, comprising:

signaling, with an executing server application, that an affinity with a selected source is to be started; and

bypassing normal workload balancing operations, in response to the signaling, for subsequent connection request messages from the selected source while the affinity persists.

Accordingly, the server application "starts" an affinity for connection request messages from a source by signaling the start of the affinity. Normal workload balancing operations are then bypassed for those messages in response to the signal from the executing server application. As explained in the specification, one embodiment of the present invention "enables an instance of a particular server application to determine dynamically, at run time, whether a relationship with a particular source (e.g., a particular client or subnet) is expected to comprise multiple successive connection requests, and then to specify that those successive requests should be directed to this same server application instance." (Specification, Page 12, lines 4-8).

In contrast, Modi describes a static approach to workload balancing in which a "non-affinity policy" or an "affinity policy" is always applied for a particular client. (See Modi, Col. 7, line 66 - Col. 8, line 15, Col. 9, line 16 - Col. 11, line 7). Modi does not describe that a portion of the system can change a "non-affinity policy" into an "affinity policy" to start an affinity with a particular source of messages, and, more particularly, provides no description whatsoever that a server application can start an affinity with a particular source.

For at least these reasons, Claim 1 is respectfully submitted to be patentable over Modi.

Independent Claims 12, 16, 23, 27, and 34 include similar recitations to Claim 1, and are submitted to patentable over Modi for at least the reasons explained for Claim 1.

Dependent claims 2-11, 13-15, 17-22, 24-26, 28-33, and 35-37 are patentable at least per the patentability of the independent claims from which they depend. Moreover, these dependent claims are respectfully submitted to provide additional bases for patentability over the cited references, as will now be explained.

Dependent Claims 6, 14, 17, 25, 28, and 36 are Patentable over Modi in View of Dutta

Dependent Claims 6, 14, 17, 25, 28, and 36 stand rejected under 35 USC §103(a) over Modi in view of U.S. Patent No.6,546,423 to Dutta et al. ("Dutta").

Claim 6 recites that the server application signals when bypassing of the normal workload balancing operations is to be ended for a selected source. The Official Action concedes that Modi does not explicitly disclose this recitation. (Official Action, Page 8). However, the Official Action then cites Dutta in an attempt to supply the missing teaching of Modi.

The Office Action states on Page 8 that "Dutta teaches signaling that the started affinity with the selected source is to be ended in order to save memory resources (col. 4, lines 41-46, 'In one embodiment...deleted, step 107.')." However, Applicant submits that the Office Action has misinterpreted the disclosure of Dutta, which is repeated below:

> The load balancing proxy determines a load balancing rule based upon the load balancing analysis performed, step 104. The load balancing rule is implemented by the firewall, step 105. In one embodiment, when the session to which the received packet belonged is terminated, the rule is deleted, thereby advantageously saving memory resources. Thus, it is determined if the session is terminated, step 106. If it is terminated, then the load balancing rule is deleted, step 107.

(Dutta, Col. 4, lines 41-46.)

The cited portion of Dutta discloses termination of a load balancing rule. It does not disclose or suggest starting or stopping a bypassing of the load balancing rule based on an affinity, and, consequently does not disclose or suggest ending bypassing of a load balancing rule in response to signaling from a server application.

Moreover, Applicant notes that the Office Action has not provided *clear and particular* evidence from Modi and Dutta themselves as to why one who is skilled in the art, with no knowledge of the claimed invention, would modify Modi to include the teachings of Dutta so as to obtain the recitations of Claim 6. Instead, it appears that the Office Action is relying on impermissible hindsight in view of the present application. Moreover, as explained above, even if those references are combined, they still would not teach each of the recitations of Claim 6.

Accordingly, Applicant respectfully submits that the Office Action has not provided a *prima facie* case for obviousness of Claim 6 over Modi in view of Dutta. Accordingly, Applicant respectfully requests withdrawal of the rejection of Claim 6.

Claims 17 and 28 contain analogous recitations to Claim 6, and are submitted to be patentable over Modi in view of Dutta for at least the reasons provided above.

Dependent Claims 7-10, 15, 18-21, 26, 29-32 and 37 are Patentable over Modi in View of Dutta and Robsman

Dependent Claims 7, 18, and 29 stand rejected under 35 USC §103(a) over Modi in view of Dutta and in view of U.S. Patent No.6,446,225 to Robsman et al. ("Robsman").

Claim 7 recites that the started affinity persists for a maximum duration, after which the bypassing of normal workload balancing operations ceases for subsequent connection request messages from the selected source. The Office Action appears to concede that neither Modi nor Dutta disclose this recitation. In an attempt to supply the missing teaching, the Office Action states that "Robsman teaches that an affinity may persist for a maximum duration (e.g., timeout period) before reverting to normal workload balancing operations in order to free system resources (col. 1, lines 17-56 ..)".

However, the cited portion of Robsman discloses establishing a connection between a server and a client, and terminating the client-server connection based on a "session timeout".

Accordingly, Robsman teaches that after expiration of the session timeout, further communications between a client and server are terminated. Such termination of client-server communications is contrary to the recitations of Claim 7, where, upon expiration of a maximum duration, communications continue, but without bypassing normal workload balancing operations.

Robsman does not disclose or suggest bypassing of normal workload balancing operations based on an affinity, or that such an affinity can persist for a maximum duration, after which bypassing of normal workload balancing operations is ceased. For at least these reasons, Applicant respectfully submits that Claim 7 is patentable over Modi in view of Dutta and Robsman.

Claims 18 and 29 contain analogous recitations to Claim 7, and are submitted to be patentable over Modi in view of Dutta and Robsman for at least the reasons provided above.

Claims 8-10 depend from Claim 7, Claims 19-21 depend from Claim 18, and Claims 30-32 depend from Claim 29, and each of these claims further define conditions when the maximum duration may be overridden or extended. As explained above, Robsman teaches that after expiration of a session timeout, further communications between a client and server are terminated. Accordingly, although Robsman teaches modifying when the session timeout occurs, once that session time occurs further communications are terminated. Such termination of client-server communications is contrary to the recitations of Claims 8-10, 19-21, and 30-32, which define conditions on which the maximum duration for bypassing of normal workload balancing operations is overridden or extended.
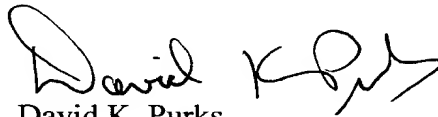
For at least these reasons, Applicant respectfully submits that Claims 8-10, 19-21, and 30-32 are patentable over Modi in view of Dutta and Robsman.

CONCLUSION

Applicant again appreciates the Examiner's thorough analysis and the citation of Modi, Dutta and Robsman. In light of the above amendments and remarks, Applicant respectfully submits that the above-entitled application is now in condition for allowance. Favorable reconsideration of this application, as amended, is respectfully requested.

Respectfully submitted,

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